

**REMARKS**

Reconsideration and allowance of this application are respectfully requested. Claim 23 has been editorially amended. Claims 1-5, 7-9, 11-16 and 19-30 are pending in the application. The rejections are respectfully submitted to be obviated in view of the remarks presented herein.

**Rejection Under 35 U.S.C. § 103(a) - Vook et al. in view of Omi et al.**

Claims 1-5, 7-9, 11-16, 19, 21-25 and 30 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Vook et al. (U.S. Patent Number 5,583,866; hereinafter “Vook”) in view of Omi et al. (U.S. Patent Number 6,940,831; “Omi”). The rejection is respectfully traversed.

An embodiment of the present invention relates to a wireless communication apparatus comprising a transceiving unit, a controller, and a memory. The transceiving unit receives and transmits data externally and maintains a link to at least one slave device and receives a requested priority from the at least one slave device, when the wireless communication apparatus is operated as a master. The controller determines a priority of the at least one slave device considering the requested priority, determines a frequency of communication according to the priority of the at least one slave device and controls the communication with the at least one slave device. The memory stores the frequency of communication of the at least one slave device.

The combination of Vook and Omi fails to teach or suggest all of the elements of claim 1. In particular, Vook fails to teach or suggest a transceiving unit receiving a requested priority

from at least one slave device, and memory which stores the frequency of communication of the at least one slave device, as recited in claim 1.

The Examiner readily admits that Vook does not disclose “receiving a requested priority according to the amount of data to be transmitted to the master device from the at least one slave device and a memory for storing the frequency of communication of the at least one slave device (Office Action page 3).

Furthermore, the priority of the devices in Vook is not determined by the access point 14 considering a requested priority of slave devices. Instead, Vook discloses determination of priority by whether or not the device is currently transmitting. Vook also fails to teach or suggest the feature of determining a frequency of communication according to the priority of the at least one slave device, as recited in claim 1. Although the Examiner points to column 7, line 34 to column 8, line 30 and Figure 3 of Vook, the cited excerpt does not indicate that the frequency of communication is determined according to the priority of the slave device. Instead, Vook discloses only that the device 12 will tune to the selected access point 14 at the channel frequency (Hz) upon which a beacon in question was received. Vook’s mere disclosure of tuning to a received channel frequency fails to teach or suggest using a received priority request to determine a priority and then determining the frequency of communication using the determined priority. Instead, Vook merely indicates that there is more than one frequency from which to select.

Additionally, Vook’s P-persistence values are assigned to devices and may vary depending upon device status, with currently transmitting devices being assigned a higher status

(higher P-persistence value) which are more likely to gain access to an idle channel (column 15, line 66 to column 16, line 36). Thus, Vook only teaches that this status defined by the P-persistence value defines a **probability** of gaining access, and not a frequency of communication. Therefore, Vook also fails to teach or suggest the determination of a frequency of communication according to the priority of the at least one slave device.

Omi fails to remedy the deficiencies of Vook. The Examiner states that “Omi discloses the limitation ‘receiving a requested priority according to the amount of data to be transmitted to the master device from the at least one slave device and a memory for storing the frequency of communication of the at least one slave device,’” and relies on column 3, line 13 to column 4, line 62, Figs. 15 and 19, and column 8, lines 20-64 for these teachings. However, Omi also does not teach or suggest receiving a request priority from a slave device, determining a priority of the slave device considering the requested priority, determining a frequency of communication according to the priority of the slave device, and storing the frequency of communication of the slave device.

Omi discloses the assigning of transmission bands according to a state of data transmission. A master station has a schedule for determining a transmission band assignment including information about the transmission timing of the data and a transmission amount. A receiving (slave) station gives information about a state of data receiving to the master station, where the scheduler reflects this on scheduling.

However even though the scheduler of Omi’s master station carries out transmission band assignment “according to an order in which the communication link has been set (requested) or a

priority order of the priority parameter included in the communication parameter,” there is no controller in Omi for determining priority of slave device considering the requested priority because Omi’s assignments are made directly from the received priority parameter, and thus there is no determination made by Omi’s master station of a priority based on the requested priority, as claimed (column 4, lines 43-48).

Furthermore, Omi also does not teach or suggest a determination of frequency of communication according to the determined priority and storing the determined frequency of communication in a memory, as claimed. Omi discloses an indication of the state of data receiving, transmission time, as well as the received data amount, however, none of these indicators would suggest a frequency of communication determined according to the priority of at least one slave device, as claimed. Nowhere does Omi teach or suggest a frequency of communication. Although Omi’s scheduler determines a timing of packet transmission, a time of transmission is also stored, and transmission time, transmission amount, and data occurrence period may be known, none of these variable suggest a determination and storing of a frequency of communication, as claimed. On the contrary, the claimed invention recites a determined frequency of communication, not occurrence periods, transmission amounts, and transmission time as disclosed by Omi. Furthermore, the claimed frequency of communication is stored in a memory of the communication apparatus.

At least by virtue of the aforementioned differences, the invention defined by claim 1 is patentable over Vook in view of Omi. Claims 2-5 and 7 are dependent claims including all of the elements of independent claim 1, which, as established above, distinguishes over Vook in

view of Omi. Therefore, claims 2-5 and 7 are distinguished over Vook in view of Omi for at least the aforementioned reasons as well as for their additionally recited features.

Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

Regarding claim 8, the combination of Vook and Omi fails to teach or suggest all of the elements of claim 8. In particular, Applicants submit that Vook fails to disclose that “the at least one slave device transmits the requested priority according to the amount of data to be transmitted to the master device,” as recited in claim 8 (emphasis added). The Examiner has admitted that Vook fails to teach or suggest this claimed element (Office Action page 3), and relies on Omi for this teaching. However, as discussed above, Vook in view of Omi still fails to teach or suggest all elements of the claimed invention.

In particular, Omi’s slave station provides a communication parameter with a priority parameter to the master station (column 4, lines 47-48), however, this priority parameter does not have any relationship to **an amount of data to be transmitted**. Even though Omi discusses calculating a data amount parameter indicating an amount of data to be transmitted (column 3, lines 55-56), Omi’s priority parameter is not transmitted according to this data amount parameter.

At least by virtue of the aforementioned differences, the invention defined by claim 8 is patentable over Vook in view of Omi. Claims 9 and 11-14 are dependent claims including all of the elements of independent claim 8, which as established above, distinguishes over Vook in view of Omi. Therefore, claims 9 and 11-14 are distinguished over Vook in view of Omi for at

least the aforementioned reasons as well as for their additionally recited features.

Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

Regarding claim 15, the combination of Vook and Omi fails to teach or suggest all of the elements of claim 15. In particular, Applicants submit that Vook and Omi, either alone or in combination, fail to teach or suggest “(c) communicating with the at least one slave device according to the priority, wherein the step (c) subtracts one time from the frequency of communication after each communication with the at least one slave device,” as recited in claim 15. Furthermore, the Examiner has not indicated where he believes any of these elements may be found in either Vook or Omi.

Vook merely illustrates time slots of a dwell, and in particular that a higher P-persistence value has a greater probability of accessing a channel during an O slot (218). Thus there is no mention or suggestion in either Vook or Omi of a subtraction of one time from the frequency of communication. At least by virtue of the aforementioned differences, the invention defined by claim 15 is patentable over Vook in view of Omi. Claim 16 is a dependent claim including all of the elements of independent claim 15, which, as established above, distinguishes over Vook in view of Omi. Therefore, claim 16 is distinguished over Vook in view of Omi for at least the aforementioned reasons as well as for its additionally recited features. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Lenny R. Jiang', written over a horizontal line.

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